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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,991	12/06/2001	Yuuji Saiki	020606	3509
38834	7590	08/26/2004	EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			LAVARIAS, ARNEL C	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/015,991

**Applicant(s)**

SAIKI ET AL.

**Examiner**

Arnel C. Lavarias

**Art Unit**

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 17-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 27-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendments to Claims 1 and 5 in the submission dated 6/7/04 are acknowledged and accepted.
2. The addition of Claims 27-31 in the submission dated 6/7/04 is acknowledged and accepted.

### ***Response to Arguments***

3. The Applicants argue that, with respect to newly amended Claim 5, Nakajima et al. fails to teach or reasonably suggest an optical member in which an adhesive layer disposed on an outermost surface of an optical material is provisionally bonded to and covered with a separator having an outer surface roughness Ra of at least 0.03 microns so that the separator can be released from the optical material. After a review of the Nakajima et al. reference, the Examiner agrees, and respectfully withdraws the rejections of Claim 5-8, 13-16 in Section 6 of the Office Action dated 3/22/04.
4. The Applicants argue that, with respect to newly amended Claim 1, Nagahama et al. in view of Arakawa et al. fails to teach or reasonably suggest an optical member including a protective film having an outer surface roughness Ra of from 0.03 to 1 micron. The Examiner respectfully disagrees. With regard to the argument that one would not be motivated to refer to the teachings of Arakawa et al. since Arakawa et al. allegedly only concerns non-optical materials, the

Examiner notes that many of the exemplary plastic films disclosed by Arakawa et al. (See for example col. 2, line 56-col. 3, line 10) are optically transparent for the disclosed thicknesses. Further, it is noted that the features upon which applicant relies (i.e., optical effects of the surface roughness) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). With regard to the argument that surface roughening in the range of 2-10 microns would whiten a transparent substrate, making it improper as an optical film, the Examiner notes that no evidence has been provided that such surface roughening of the 2-10 micron order would 'whiten' a transparent substrate. Additionally, the 2-10 micron surface range is merely exemplary. On col. 2, lines 27-41, Arakawa et al. specifically teaches that the surface roughness Ra not be larger than  $\frac{1}{2}$  (and be preferably between  $\frac{1}{4}$  to  $\frac{1}{10}$ ) the thickness of the film.

5. Claims 1-16, 27-31 are rejected as follows.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 9-12, 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagahama et al. (WO00/44841), of record, in view of Arakawa et al. (U.S. Patent No. 5972473), of record.

Nagahama et al. discloses an optical member (See Figure 7) in which a surface of an optical material (See 15, 16 in Figure 7) is bonded to and covered with a protective film (See 11, 12 or 14, 11 in Figure 7), wherein the protective film comprises a protective base and an adhesive layer disposed on the protective base so that the protective base can be released together with the adhesive layer from the optical material (See Abstract; 11, 12 or 11, 14 in Figure 7). Nagahama et al. additionally discloses the protective film being disposed on one surface of the optical material (See for example 11, 12 in Figure 7), a separator being provided on the other surface of the optical material via an adhesive layer (See 11, 14 in Figure 7), the optical material comprising a polarizing plate (See 16 in Figure 7), a liquid display having the optical member (See Abstract); and the protective film thickness not being more than 300  $\mu\text{m}$  (See for example Page 7 (Page 14 of translation), as well as various disclosed examples of the protective film on Pages 17-27 (Pages 31-47 of the translation)). Nagahama et al. lacks the protective film having an outer surface roughness Ra of from 0.03 to 1  $\mu\text{m}$ . However, Arakawa et al. teaches the use of a protective plastic film that has a matte or embossed surface (See for example Figure 4), the protective plastic film being used as a separator or protective film (See Abstract). In particular, Arakawa et al. teaches that the outer surface of the protective film may have a surface roughness Ra (which is typically 2-25 microns for exemplary film thicknesses of 20-50  $\mu\text{m}$ ) that

is at most  $\frac{1}{2}$  of the protective film thickness (See col. 2, lines 26-50). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the protective film of Nagahama et al. exhibit an outer surface roughness Ra of from 0.03-1  $\mu\text{m}$ , as taught by Arakawa et al., for the purpose of reducing the friction coefficient of the surface of the film.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagahama et al. in view of Arakawa et al. as applied to Claim 1 above, and further in view of Iwata et al. (U.S. Patent No. 6111699), of record.

Nagahama et al. in view of Arakawa et al. discloses the invention as set forth above in Claim 1, except for the optical material further including at least one of a retardation plate and a brightness enhancement plate. However, Iwata et al. discloses an optical member (See for example Figures 6B, 7, 11) in which an adhesive layer (See 34 of Figure 6B) disposed on an outermost surface of an optical material (See 12 in Figure 6B) is provisionally bonded to and covered with a separator (See 36 in Figure 6B). Iwata et al. additionally discloses the separator being disposed on one surface of the optical material (See Figures 6B, 7), a protective film being provided on the other surface of the optical material (See 18, 32 in Figures 6B) having an outer surface roughness Ra of at least 0.03  $\mu\text{m}$  (See Abstract; col. 5, lines 50-65), the optical material comprising a polarizing plate and at least one of a retardation plate and a brightness enhancement plate (See for example 42 in Figure 7; 42, 86 in Figure 11), and a liquid display having the optical member (See for example col. 10, line 25-32). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was

made to have the optical material further include at least one of a retardation plate and a brightness enhancement plate, as taught by Iwata et al., in the optical member of Nagahama et al. in view of Arakawa et al., for the purpose of reducing the cost and complexity of manufacturing the liquid crystal display panel.

9. Claims 5-7, 13-16, 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagahama et al. in view of Arakawa et al.

Nagahama et al. discloses an optical member (See Figure 7) in which an adhesive layer disposed on an outermost surface of an optical material is provisionally bonded to and covered with a separator so that the separator can be released from the optical material (See 11, 14 in Figure 7). Nagahama et al. additionally discloses a protective film being disposed on one surface of the optical material (See for example 11, 12 in Figure 7), the separator being provided on the other surface of the optical material via an adhesive layer (See 11, 14 in Figure 7), the optical material comprising a polarizing plate (See 16 in Figure 7), a liquid display having the optical member (See Abstract); and the protective film thickness not being more than 300  $\mu\text{m}$  (See for example Page 7 (Page 14 of translation), as well as various disclosed examples of the protective film on Pages 17-27 (Pages 31-47 of the translation)). Nagahama et al. lacks the protective film having an outer surface roughness  $R_a$  of at least 0.03  $\mu\text{m}$ . However, Arakawa et al. teaches the use of a protective plastic film that has a matte or embossed surface (See for example Figure 4), the protective plastic film being used as a separator or protective film (See Abstract). In particular, Arakawa et al. teaches that the outer surface of the protective film may have a surface roughness  $R_a$  (which is typically

2-25 microns for exemplary film thicknesses of 20-50  $\mu\text{m}$ ) that is at most  $\frac{1}{2}$  of the protective film thickness (See col. 2, lines 26-50). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the protective film of Nagahama et al. exhibit an outer surface roughness Ra of at least 0.03  $\mu\text{m}$ , as taught by Arakawa et al., for the purpose of reducing the friction coefficient of the surface of the film.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagahama et al. in view of Arakawa et al. as applied to Claim 5 above, and further in view of Iwata et al.

Nagahama et al. in view of Arakawa et al. discloses the invention as set forth above in Claim 5, except for the optical material further including at least one of a retardation plate and a brightness enhancement plate. However, Iwata et al. discloses an optical member (See for example Figures 6B, 7, 11) in which an adhesive layer (See 34 of Figure 6B) disposed on an outermost surface of an optical material (See 12 in Figure 6B) is provisionally bonded to and covered with a separator (See 36 in Figure 6B). Iwata et al. additionally discloses the separator being disposed on one surface of the optical material (See Figures 6B, 7), a protective film being provided on the other surface of the optical material (See 18, 32 in Figures 6B) having an outer surface roughness Ra of at least 0.03  $\mu\text{m}$  (See Abstract; col. 5, lines 50-65), the optical material comprising a polarizing plate and at least one of a retardation plate and a brightness enhancement plate (See for example 42 in Figure 7; 42, 86 in Figure 11), and a liquid display having the optical member (See for example col. 10, line 25-32). Therefore, it would have



been obvious to one having ordinary skill in the art at the time the invention was made to have the optical material further include at least one of a retardation plate and a brightness enhancement plate, as taught by Iwata et al., in the optical member of Nagahama et al. in view of Arakawa et al., for the purpose of reducing the cost and complexity of manufacturing the liquid crystal display panel.

### *Conclusion*

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is

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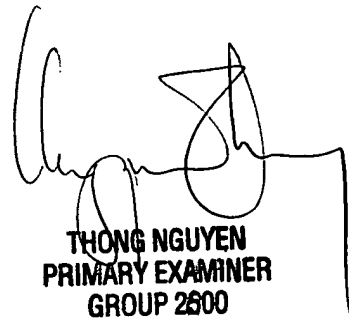
571-272-2315. The examiner can normally be reached on M-F 8:30 AM - 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arnel C. Lavarias  
8/23/04



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